

## 特許協力条約に基づく国際出願願書

紙面による写し(注意:電子データが原本となります)

|        |                                                |                                                               |
|--------|------------------------------------------------|---------------------------------------------------------------|
| 0      | 受理官庁記入欄<br>0-1<br>国際出願番号                       |                                                               |
| 0-2    | 国際出願日                                          |                                                               |
| 0-3    | (受付印)                                          |                                                               |
| 0-4    | 様式-PCT/RO/101<br>この特許協力条約に基づく国際出願願書<br>は、      |                                                               |
| 0-4-1  | 右記によって作成された。                                   | JPO-PAS<br>0322                                               |
| 0-5    | 申立て<br>出願人は、この国際出願が特許協力条約<br>に従って処理されることを請求する。 |                                                               |
| 0-6    | 出願人によって指定された受理官庁                               | 日本国特許庁 (R0/JP)                                                |
| 0-7    | 出願人又は代理人の書類記号                                  | AY05-0125W03                                                  |
| I      | 発明の名称                                          | C o - C r - P t - B 系合金スパッタリングターゲット                           |
| II     | 出願人<br>II-1 この欄に記載した者は                         | 出願人である (applicant only)                                       |
| II-2   | 右の指定国についての出願人である。                              | 米国を除く全ての指定国 (all designated States except US)                 |
| II-4ja | 名称                                             | 株式会社 日鉛マテリアルズ                                                 |
| II-4en | Name:                                          | Nikko Materials Co., Ltd.                                     |
| II-5ja | あて名                                            | 1050001<br>日本国<br>東京都港区虎ノ門二丁目10番1号                            |
| II-5en | Address:                                       | 10-1, Toranomon 2-chome, Minato-ku, Tokyo<br>1050001<br>Japan |
| II-6   | 国籍(国名)                                         | 日本国 JP                                                        |
| II-7   | 住所(国名)                                         | 日本国 JP                                                        |
| II-8   | 電話番号                                           | 03-5573-6564                                                  |
| II-9   | ファクシミリ番号                                       | 03-5573-6779                                                  |
| II-11  | 出願人登録番号                                        | 591007860                                                     |

## 特許協力条約に基づく国際出願願書

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|           |                             |                                                                                                                                 |
|-----------|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| III-1     | その他のお願い人又は発明者<br>この欄に記載した者は | 出願人及び発明者である (applicant and inventor)<br>米国のみ (US only)                                                                          |
| III-1-2   | 右の指定国についての出願人である。           | 中村 裕一郎                                                                                                                          |
| III-1-4ja | 氏名(姓名)                      | NAKAMURA Yuichiro                                                                                                               |
| III-1-4en | Name (LAST, First):         | 3191535                                                                                                                         |
| III-1-5ja | あて名                         | 日本国<br>茨城県北茨城市華川町臼場187番地4 株式会社日<br>鉱マテリアルズ磯原工場内                                                                                 |
| III-1-5en | Address:                    | c/o Isohara Factory of Nikko Materials Co., Ltd.<br>187-4, Usuba, Hanakawa-cho, Kitaibaraki-shi,<br>Ibaraki<br>3191535<br>Japan |
| III-1-6   | 国籍(国名)                      | 日本国 JP                                                                                                                          |
| III-1-7   | 住所(国名)                      | 日本国 JP                                                                                                                          |
| III-2     | その他の出願人又は発明者<br>この欄に記載した者は  | 出願人及び発明者である (applicant and inventor)<br>米国のみ (US only)                                                                          |
| III-2-1   | 右の指定国についての出願人である。           | 久野 晃                                                                                                                            |
| III-2-4ja | 氏名(姓名)                      | HISANO Akira                                                                                                                    |
| III-2-4en | Name (LAST, First):         | 3191535                                                                                                                         |
| III-2-5ja | あて名                         | 日本国<br>茨城県北茨城市華川町臼場187番地4 株式会社日<br>鉱マテリアルズ磯原工場内                                                                                 |
| III-2-5en | Address:                    | c/o Isohara Factory of Nikko Materials Co., Ltd.<br>187-4, Usuba, Hanakawa-cho, Kitaibaraki-shi,<br>Ibaraki<br>3191535<br>Japan |
| III-2-6   | 国籍(国名)                      | 日本国 JP                                                                                                                          |
| III-2-7   | 住所(国名)                      | 日本国 JP                                                                                                                          |

## 特許協力条約に基づく国際出願願書

紙面による写し(注意:電子データが原本となります)

|          |                                                                                                                                 |       |            |
|----------|---------------------------------------------------------------------------------------------------------------------------------|-------|------------|
| IV-1     | 代理人又は共通の代表者、通知のあて名<br>下記の者は国際機関において右記のごとく<br>出願人のために行動する。<br>IV-1-1a 氏名(姓名)                                                     |       |            |
| IV-1-1en | Name (LAST, First):                                                                                                             |       |            |
| IV-1-2ja | あて名                                                                                                                             |       |            |
| IV-1-2en | Address:                                                                                                                        |       |            |
| IV-1-3   | 電話番号                                                                                                                            |       |            |
| IV-1-4   | ファクシミリ番号                                                                                                                        |       |            |
| IV-1-5   | 代理人登録番号                                                                                                                         |       |            |
| V        | 国の指定                                                                                                                            |       |            |
| V-1      | この願書を用いてされた国際出願は、規則<br>4.9(c)に基づき、国際出願の時点で拘束さ<br>れる全てのPCT締約国を指定し、取得しよう<br>あらざる種類の保護を求め、及び該当する<br>場合には広域と国内特許の両方を求める<br>国際出願となる。 |       |            |
| VI-1     | 先の国内出願に基づく優先権主張                                                                                                                 |       |            |
| VI-1-1   | 出願日                                                                                                                             |       |            |
| VI-1-2   | 出願番号                                                                                                                            |       |            |
| VI-1-3   | 国名                                                                                                                              |       |            |
| VII-1    | 特定された国際調査機関(ISA)                                                                                                                |       |            |
| VIII-1   | 申立て                                                                                                                             | 申立て数  |            |
| VIII-1-1 | 発明者の特定に関する申立て                                                                                                                   | -     |            |
| VIII-2   | 出願し及び特許を与えられる国際出願日に<br>おける出願人の資格に関する申立て                                                                                         | -     |            |
| VIII-3   | 先の出願の優先権を主張する国際出願日<br>における出願人の資格に関する申立て                                                                                         | -     |            |
| VIII-4   | 発明者である旨の申立て(米国を指定国と<br>する場合)                                                                                                    | -     |            |
| VIII-5   | 不利にならない開示又は新規性喪失の例<br>外に関する申立て                                                                                                  | -     |            |
| IX       | 照合欄                                                                                                                             | 用紙の枚数 | 添付された電子データ |
| IX-1     | 願書(申立てを含む)                                                                                                                      | 4     | ✓          |
| IX-2     | 明細書                                                                                                                             | 7     | ✓          |
| IX-3     | 請求の範囲                                                                                                                           | 1     | ✓          |
| IX-4     | 要約                                                                                                                              | 1     | ✓          |
| IX-5     | 図面                                                                                                                              | 1     | ✓          |
| IX-7     | 合計                                                                                                                              | 14    |            |

特許協力条約に基づく国際出願  
国際予備審査請求書

出願人は、次の国際出願が特許協力条約に從つて国際予備審査の対象とされることを請求する。

|                                                                                                  |          |
|--------------------------------------------------------------------------------------------------|----------|
| 国際予備審査機関記入欄                                                                                      |          |
| 国際予備審査機関の確認                                                                                      | 請求書の受達の日 |
|  22.8.05<br>受領印 |          |

|                    |                               |
|--------------------|-------------------------------|
| 第Ⅰ 特開 国際出願の登録記入欄   | 出願人又は代理人の書類記号<br>AY05-0125W03 |
| 国際出願番号             | 国際出願日 (B. 月. 年)               |
| PCT/JP 2005/002221 | 15. 02. 2005                  |

発明の名称  
Co-Cr-Pt-B系合金スパッタリングターゲット

|                                                                                                                                         |                         |
|-----------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| 第Ⅱ 特開 出願人                                                                                                                               |                         |
| 氏名 (名称) 及びあて名 : (姓、名の順に記載; 法人は公式の完全な名称を記載; あて名は郵便番号及び固有名も記載)                                                                            | 電話番号 : 03-5573-6564     |
| 株式会社 日鉛マテリアルズ<br>Nikko Materials Co., Ltd.<br>〒105-0001 日本国東京都港区虎ノ門二丁目10番1号<br>10-1, Toranomon 2-chome, Minato-ku, Tokyo 105-0001 JAPAN | ファクシミリ番号 : 03-5573-6779 |
|                                                                                                                                         | 加入電信番号 :                |
|                                                                                                                                         | 出願人登録番号 :               |

|                                                                                                                                              |                     |
|----------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| 国籍 (固名) : 日本国 JAPAN                                                                                                                          | 住所 (固名) : 日本国 JAPAN |
| 氏名 (名称) 及びあて名 : (姓、名の順に記載; 法人は公式の完全な名称を記載; あて名は郵便番号及び固有名も記載)                                                                                 |                     |
| 中村 祐一郎 NAKURAMA Yuichiro<br>〒319-1535 日本国茨城県北茨城市華川町臼場187番地4                                                                                  |                     |
| 株式会社日鉛マテリアルズ磯原工場内<br>c/o Isohara Factory of Nikko Materials Co., Ltd.<br>187-4, Usoba, Hanakawa-cho, Kitaibaraki-shi, Ibaraki 319-1535 Japan |                     |

|                                                                                                                                              |                     |
|----------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| 国籍 (固名) : 日本国 JAPAN                                                                                                                          | 住所 (固名) : 日本国 JAPAN |
| 氏名 (名称) 及びあて名 : (姓、名の順に記載; 法人は公式の完全な名称を記載; あて名は郵便番号及び固有名も記載)                                                                                 |                     |
| 久野 晃 HISANO Akira<br>〒319-1535 日本国茨城県北茨城市華川町臼場187番地4                                                                                         |                     |
| 株式会社日鉛マテリアルズ磯原工場内<br>c/o Isohara Factory of Nikko Materials Co., Ltd.<br>187-4, Usoba, Hanakawa-cho, Kitaibaraki-shi, Ibaraki 319-1535 Japan |                     |

|                                              |                     |
|----------------------------------------------|---------------------|
| 国籍 (固名) : 日本国 JAPAN                          | 住所 (固名) : 日本国 JAPAN |
| <input type="checkbox"/> その他の出願人が紙面に記載されている。 |                     |

REPLY (ARGUMENT)

1) The following opinions were expressed in the Response dated May 24, 2005 issued by the PCT International Searching Authority.

A) The invention pertaining to claims 1 to 5 lacks novelty and inventive step since it is described in claims 1, 2 and paragraphs [0026] to [0030] of Document 1, and in paragraphs [0016] to [0026] and Fig. 1 of Document 2.

B) The invention pertaining to claim 6 lacks novelty and inventive step since it is described in claims 1, 2 and paragraphs [0026] to [0030] of Document 1.

Incidentally, the cited documents are the following Documents 1 and 2.

Document 1: JP2002-69623

Document 2: JP2001-26860

2) Nevertheless, the present invention is clearly different from cited Document 1 and Document 2, and possesses patentability. The reason for this is explained in detail below. Incidentally, the amended claims are indicated once again below for the sake of convenience in comparing the present invention with the cited Documents.

(Claims)

[1] (Amended) A Co-Cr-Pt-B alloy sputtering target comprising an island-shaped rolled structure formed from a Co-rich phase based on the primary crystal formed upon casting, and comprising a Co-rich phase and B-rich phase island structure based on the eutectic structure formed upon solidification between the island-shaped structures formed from a Co-rich phase based on the primary crystal.

[2] A Co-Cr-Pt-B alloy sputtering target according to claim 1, wherein the island-shaped rolled structure has an average size of 200 $\mu\text{m}$  or less.

[3] (Deleted)

[4] (Amended) A Co-Cr-Pt-B alloy sputtering target according to claim 1 or claim 2, wherein the average crystal grain size of the crystal in the Co-rich phase is 50 $\mu\text{m}$  or less.

[5] (Amended) A Co-Cr-Pt-B alloy sputtering target according to any one of claims 1, 2 or 4, comprising a hot rolled structure.

[6] A Co-Cr-Pt-B alloy sputtering target according to claim 5, wherein the hot

rolling ratio is 15 to 40%.

3) The amendments are explained briefly below. The invention of claim 1 before amendment was described somewhat broadly, and the distinction from the cited documents was not sufficiently clear. Thus, we introduced the requirement of claim 3 into claim 1 and limited the scope thereof. The redundant claim 3 has been deleted.

The other amendments deleted the citing of claim 3 in the dependent claims, but there is no substantial difference in the subject matter of such dependent claims. Please also note that no new matter has been introduced.

4) Next, the invention of independent claim 1 and the cited Documents are compared.

Foremost, Document 1 (JP2002-69623) relates to a Co-Cr-Pt-B target having a target structure in which the average size of the cells segmentalized by a boride network is 200 $\mu$ m or less. The boride network itself, as shown in the drawings of Document 1, is not segmentalized, and is joined in a net-like shape across the entire target structure.

Meanwhile, the invention of claim 1 "comprises an island-shaped rolled structure formed from a Co-rich phase based on the primary crystal formed upon casting, and comprises a Co-rich phase and B-rich phase island structure based on the eutectic structure formed upon solidification between the island-shaped structures formed from a Co-rich phase based on the primary crystal". The present invention does not have a net-like "boride network" across the entire target as shown in Document 1.

Further, as described in claim 1, the present invention comprises "a Co-rich phase and B-rich phase island structure based on the eutectic structure formed upon solidification between the island-shaped structures formed from a Co-rich phase based on the primary crystal".

Meanwhile, although the structure of "cells segmentalized by a boride network" of Document 1 is not necessarily clear, it seems to be of a uniform structure. Since the structure of the present invention is not an unclear structure or uniform structure as with Document 1, it is clearly different from the structure of Document 1 with respect to this point.

Accordingly, the target structure of the invention pertaining to claim 1 and

the Co-Cr-Pt-B target structure of Document 1 are entirely different.

As a result of comprising the foregoing structure, the present invention yields a superior effect of reducing the segregation and internal stress inside the sputtering target to obtain a fine and uniform rolled structure, and as a result enabling the formation of a high-quality film, and the significant improvement in the production yield thereof. A structure that is different from the present invention will have different deposition properties during sputtering as a matter of course. Document 1 does not possess the operation and effect of the present invention.

Therefore, the present invention is not the same as the invention of Document 1, nor could it have been easily devised based on Document 1.

5) Next, Document 2 (JP2001-26860) relates to a Co-Cr-Pt-B target having a target structure in which the boride is dispersed in layers in cross section of the target. There is no explanation other than this layered boride structure.

The structure described in Document 2 is entirely different from the Co-Cr-Pt-B alloy sputtering target "comprising an island-shaped rolled structure formed from a Co-rich phase based on the primary crystal formed upon casting, and comprising a Co-rich phase and B-rich phase island structure based on the eutectic structure formed upon solidification between the island-shaped structures formed from a Co-rich phase based on the primary crystal" of claim 1.

As mentioned above, by comprising the foregoing structure, the present invention yields a superior effect of reducing the segregation and internal stress inside the sputtering target to obtain a fine and uniform rolled structure, and as a result enabling the formation of a high-quality film, and the significant improvement in the production yield thereof.

A structure that is different from the present invention will have different deposition properties during sputtering as a matter of course. Document 2 does not possess the operation and effect of the present invention.

Therefore, the present invention is not the same as the invention of Document 2, nor could it have been easily devised based on Document 2.

6) Although only independent claim 1 was compared to the cited Documents, dependent claims 2, 4, 5 and 6 comprise the elements of claim 1 as a matter of course, and are more different in comparison to Document 1 and Document 2.

Therefore, dependent claims 2, 4, 5 and 6 also possess patentability.

7) Accordingly, the invention pertaining to claims 1, 2, 4, 5 and 6 of this PCT application is not the same as, nor could it have been easily achieved based on, the technology described in the cited Documents 1 and 2, and such cited Documents cannot be used as grounds for denying the present invention. Thus, we believe that the present invention clearly possesses inventive step.

We ask that the Examiner reexamine this once again and render judgment that the present invention possesses patentability.

## PATENT COOPERATION TREATY

## PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY  
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

|                                                                                                                                                                                     |                                                                 |                                                     |                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------|-----------------------|
| Applicant's or agent's file reference<br><b>AY05-0125W03</b>                                                                                                                        | FOR FURTHER ACTION                                              |                                                     | See Form PCT/IPEA/416 |
| International application No.<br><b>PCT/JP2005/002221</b>                                                                                                                           | International filing date (day/month/year)<br><b>15.02.2005</b> | Priority date (day/month/year)<br><b>26.03.2004</b> |                       |
| International Patent Classification (IPC) or national classification and IPC<br><b>Int. Cl. C23C19/34 (2006.01) C22C19/07 (2006.01)<br/>H01F10/16 (2006.01) H01F41/18 (2006.01)</b> |                                                                 |                                                     |                       |
| Applicant<br><b>Nippon Mining &amp; Metals Co.,Ltd.</b>                                                                                                                             |                                                                 |                                                     |                       |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>3</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> (<i>sent to the applicant and to the International Bureau</i>) a total of <u>1</u> sheets, as follows:</p> <p><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p> <p>4. This report contains indications relating to the following items:</p> |  |
| <input checked="" type="checkbox"/> Box No. I Basis of the report<br><input type="checkbox"/> Box No. II Priority<br><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability<br><input type="checkbox"/> Box No. IV Lack of unity of invention<br><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement<br><input type="checkbox"/> Box No. VI Certain documents cited<br><input type="checkbox"/> Box No. VII Certain defects in the international application<br><input type="checkbox"/> Box No. VIII Certain observations on the international application                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |

|                                                       |                                                        |
|-------------------------------------------------------|--------------------------------------------------------|
| Date of submission of the demand<br><b>22.08.2005</b> | Date of completion of this report<br><b>29.03.2006</b> |
| Name and mailing address of the IPEA/                 | Authorized officer                                     |
| Facsimile No.                                         | Telephone No.                                          |

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2006/002221

## Box No. I Basis of the report

1. With regard to the language, this report is based on:

- the international application in the language in which it was filed  
 a translation of the international application into \_\_\_\_\_, which is the language of a translation furnished for the purposes of:  
 international search (Rules 12.3(a) and 23.1(b))  
 publication of the international application (Rule 12.4(a))  
 international preliminary examination (Rules 55.2(a) and/or 55.3(e))

2. With regard to the elements of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

- the international application as originally filed/furnished  
 the description: pages \_\_\_\_\_ 1 - 7 \_\_\_\_\_ as originally filed/furnished  
 pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_  
 pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- the claims: pages \_\_\_\_\_ 2, 6 \_\_\_\_\_ as originally filed/furnished  
 pages\* \_\_\_\_\_ as amended (together with any statement) under Article 19  
 pages\* \_\_\_\_\_ received by this Authority on 22. 08. 2005  
 pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- the drawings: pages \_\_\_\_\_ 1 - 3 \_\_\_\_\_ as originally filed/furnished  
 pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_  
 pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3.  The amendments have resulted in the cancellation of:

- the description, pages \_\_\_\_\_  
 the claims, Nos. \_\_\_\_\_ 3 \_\_\_\_\_  
 the drawings, sheets/figs \_\_\_\_\_  
 the sequence listing (*specify*): \_\_\_\_\_  
 any table(s) related to sequence listing (*specify*): \_\_\_\_\_

4.  This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- the description, pages \_\_\_\_\_  
 the claims, Nos. \_\_\_\_\_  
 the drawings, sheets/figs \_\_\_\_\_  
 the sequence listing (*specify*): \_\_\_\_\_  
 any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2005/00222

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

|                               |        |           |     |
|-------------------------------|--------|-----------|-----|
| Novelty (N)                   | Claims | 1, 2, 4-6 | YES |
|                               | Claims |           | NO  |
| Inventive step (IS)           | Claims | 1, 2, 4-6 | YES |
|                               | Claims |           | NO  |
| Industrial applicability (IA) | Claims | 1, 2, 4-6 | YES |
|                               | Claims |           | NO  |

## 2. Citations and explanations (Rule 70.7)

# 特許協力条約

P C T

特許性に関する国際予備審査報告（特許協力条約第二章）

（法第12条、法施行規則第56条）  
〔P C T 36条及びP C T 規則70〕



|                                                                                                       |                                               |                                  |
|-------------------------------------------------------------------------------------------------------|-----------------------------------------------|----------------------------------|
| 出願人又は代理人<br>の書類記号 AY05-0125W03                                                                        | 今後の手続きについては、様式P C T / I P E A / 4 1 6を参照すること。 |                                  |
| 国際出願番号<br>P C T / J P 2 0 0 5 / 0 0 2 2 2 1                                                           | 国際出願日<br>(日.月.年) 1 5. 0 2. 2 0 0 5            | 優先日<br>(日.月.年) 2 6. 0 3. 2 0 0 4 |
| 国際特許分類 (I P C) Int.Cl. C23C14/34(2006.01), C22C19/07(2006.01), H01F10/16(2006.01), H01F41/18(2006.01) |                                               |                                  |
| 出願人（氏名又は名称）<br>株式会社 日鉄マテリアルズ                                                                          |                                               |                                  |

1. この報告書は、P C T 36条に基づきこの国際予備審査機関で作成された国際予備審査報告である。  
法施行規則第57条（P C T 36条）の規定に従い送付する。

2. この国際予備審査報告は、この表紙を含めて全部で 3 ページからなる。

3. この報告には次の附属物件も添付されている。  
a.  附屬書類は全部で 1 ページである。

补正されて、この報告の基礎とされた及び／又はこの国際予備審査機関が認めた訂正を含む明細書、請求の範囲及び／又は図面の用紙（P C T 規則70.16及び実施細則第607号参照）

第Ⅰ欄4. 及び補充欄に示したように、出願時における国際出願の開示の範囲を超えた補正を含むものとの国際予備審査機関が認定した差替え用紙

b.  電子媒体は全部で \_\_\_\_\_ (電子媒体の種類、数を示す)。  
配列表に関する補充欄に示すように、電子形式による配列表又は配列表に関するテーブルを含む。  
(実施細則第802号参照)

4. この国際予備審査報告は、次の内容を含む。

第Ⅰ欄 国際予備審査報告の基礎  
 第Ⅱ欄 優先権  
 第Ⅲ欄 新規性、進歩性又は産業上の利用可能性についての国際予備審査報告の不作成  
 第Ⅳ欄 発明の單一性の欠如  
 第Ⅴ欄 P C T 36条(2)に規定する新規性、進歩性又は産業上の利用可能性についての見解、それを裏付けるための文献及び説明  
 第Ⅵ欄 ある種の引用文献  
 第Ⅶ欄 国際出願の不備  
 第Ⅷ欄 国際出願に対する意見

|                                                                               |                                                                                    |
|-------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| 国際予備審査の請求書を受理した日<br>2 2. 0 8. 2 0 0 5                                         | 国際予備審査報告を作成した日<br>2 9. 0 3. 2 0 0 6                                                |
| 名称及びあて先<br>日本国特許庁 (I P E A / J P)<br>郵便番号 1 0 0 - 8 9 1 5<br>東京都千代田区麹町三丁目4番3号 | 特許庁審査官（権限のある職員）<br>田中 則充<br>電話番号 0 3 - 3 5 8 1 - 1 1 0 1 内線 3 4 1 6<br>4 G 9 7 3 0 |

## 第I欄 報告の基礎

1. 言語に關し、この予備審査報告は以下のものを基礎とした。

- 出願時の言語による国際出願  
 出願時の言語から次の目的のための言語である \_\_\_\_\_ 語に翻訳された、この国際出願の翻訳文  
 國際調査 (PCT規則12.3(a)及び23.1(b))  
 国際公開 (PCT規則12.4(a))  
 国際予備審査 (PCT規則55.2(a)又は55.3(a))

2. この報告は下記の出願書類を基礎とした。(法第6条 (PCT第14条) の規定に基づき命令に応答するために提出された差替え用紙は、この報告において「出願時」とし、この報告に添付していない。)

- 出願時の国際出願書類

- 明細書

第 1 - 7 ページ、出願時に提出されたもの  
 第 \_\_\_\_\_ ページ\*、\_\_\_\_\_ 付けで国際予備審査機関が受理したもの  
 第 \_\_\_\_\_ ページ\*、\_\_\_\_\_ 付けで国際予備審査機関が受理したもの

- 請求の範囲

第 2, 6 項、出願時に提出されたもの  
 第 \_\_\_\_\_ 項\*、PCT第19条の規定に基づき補正されたもの  
 第 1, 4, 5 項\*、22.08.2005 付けで国際予備審査機関が受理したもの  
 第 \_\_\_\_\_ 項\*、\_\_\_\_\_ 付けで国際予備審査機関が受理したもの

- 図面

第 1 - 3 ページ図、出願時に提出されたもの  
 第 \_\_\_\_\_ ページ/図\*、\_\_\_\_\_ 付けで国際予備審査機関が受理したもの  
 第 \_\_\_\_\_ ページ/図\*、\_\_\_\_\_ 付けで国際予備審査機関が受理したもの

- 配列表又は関連するテーブル

配列表に関する補充欄を参照すること。

3.  補正により、下記の書類が削除された。

- 明細書 第 \_\_\_\_\_ ページ  
 請求の範囲 第 3 \_\_\_\_\_ 項  
 図面 第 \_\_\_\_\_ ページ/図  
 配列表 (具体的に記載すること)  
 配列表に関するテーブル (具体的に記載すること) \_\_\_\_\_

4.  この報告は、補充欄に示したように、この報告に添付されかかつ以下に示した補正が出願時に開示の範囲を超えてされたものと認められるので、その補正がされなかつたものとして作成した。(PCT規則70.2(c))

- 明細書 第 \_\_\_\_\_ ページ  
 請求の範囲 第 \_\_\_\_\_ 項  
 図面 第 \_\_\_\_\_ ページ/図  
 配列表 (具体的に記載すること)  
 配列表に関するテーブル (具体的に記載すること) \_\_\_\_\_

\* 4. に該当する場合、その用紙に "superseded" と記入されることがある。

第V欄 新規性、進歩性又は産業上の利用可能性についての法第12条（PCT第35条(2)）に定める見解、それを裏付ける文献及び説明

## 1. 見解

|                 |                          |        |
|-----------------|--------------------------|--------|
| 新規性 (N)         | 請求の範囲 1, 2, 4-6<br>請求の範囲 | 有<br>無 |
| 進歩性 (I S)       | 請求の範囲 1, 2, 4-6<br>請求の範囲 | 有<br>無 |
| 産業上の利用可能性 (I A) | 請求の範囲 1, 2, 4-6<br>請求の範囲 | 有<br>無 |

## 2. 文献及び説明 (PCT規則70.7)

## 請求の範囲 1, 2, 4-6

鋳造時の初晶をベースとしたCoリッチ相からなる島状の圧延組織を備え、該組織間に、凝固時の共晶組織をベースとしたCoリッチ相とBリッチ相の島状組織を備えているCo-Cr-Pt-B系合金スパッタリングターゲットは、国際調査報告に引用されたいずれの文献にも記載されておらず、また、当業者にとって自明なものでもない。

## 請求の範囲

- [1] (補正後) 鋳造時の初晶をベースとしたCoリッチ相からなる島状の圧延組織を備え、該初晶をベースとしたCoリッチ相からなる島状の組織間に、凝固時の共晶組織をベースとしたCoリッチ相とBリッチ相の島状組織を編んでいることを特徴とするCo-Cr-Pt-B系合金スパッタリングターゲット。
- [2] 島状の圧延組織が平均寸法200μm以下であることを特徴とする請求項1記載のCo-Cr-Pt-B系合金スパッタリングターゲット。
- [3] (削除)
- [4] (補正後) Coリッチ相内の結晶の平均粒径が50μm以下であることを特徴とする請求項1又は2記載のCo-Cr-Pt-B系合金スパッタリングターゲット。
- [5] (補正後) 熱間圧延組織を備えていることを特徴とする請求項1、2、4のいずれかに記載のCo-Cr-Pt-B系合金スパッタリングターゲット。
- [6] 熱間圧延率が15～40%であることを特徴とする請求項5記載のCo-Cr-Pt-B系合金スパッタリングターゲット。

## PATENT COOPERATION TREATY

PCT

NOTIFICATION OF THE RECORDING  
OF A CHANGE(PCT Rule 92bis.1 and  
Administrative Instructions, Section 422)

Date of mailing (day/month/year)  
19 June 2006 (19.06.2006)

From the INTERNATIONAL BUREAU

To:

OGOSHI, Isamu  
OGOSHI International Patent Office  
Toranomon 9 Mori Bldg. 3F, 2Chome  
Atago 1-Chome, Minato-ku, Tokyo  
1050002  
Japan



Applicant's or agent's file reference  
AY05-0125WO3

## IMPORTANT NOTIFICATION

International application No.  
PCT/JP2005/002221

International filing date (day/month/year)  
15 February 2005 (15.02.2005)

1. The following indications appeared on record concerning:

the applicant     the inventor     the agent     the common representative

Name and Address  
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10-1, Toranomon 2-chome, Minato-  
ku, Tokyo  
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State of Residence  
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Telephone No.

Facsimile No.

Teleprinter No.

2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

the person     the name     the address     the nationality     the residence

Name and Address  
NIPPON MINING & METALS CO., LTD.  
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State of Residence  
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Facsimile No.

Teleprinter No.

3. Further observations, if necessary:

4. A copy of this notification has been sent to:

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| <input type="checkbox"/> the International Searching Authority                        | <input checked="" type="checkbox"/> the elected Offices concerned |
| <input checked="" type="checkbox"/> the International Preliminary Examining Authority | <input type="checkbox"/> other:                                   |

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

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